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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,553	01/17/2007	Terukazu Tokuoka	050388-0045	8681
20277 7590 12/01/2009 MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096				
EXAMINER				
LEE, REBECCA Y				
ART UNIT		PAPER NUMBER		
1793				
MAIL DATE		DELIVERY MODE		
12/01/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/581,553

Applicant(s)

TOKUOKA ET AL.

Examiner

REBECCA LEE

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 6-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/CD)
Paper No(s)/Mail Date 10/14/09
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of Claims

Claims 6-8 are withdrawn. Claims 1-5 are pending where claim 1 is amended in view of amendment filed 10/14/09.

Status of Previous Rejections

The rejections of claims 1-5 under 35 U.S.C. 103(a) have been maintained.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otani et al. (JP62083444).

Otani et al. is applied to claims 1-5 as set forth in the 07/20/09 office action.

With respect to the amended feature in claim 1, such limitations are considered as process limitations in a product-by-process claim. It is well settled that a product-by-process claim defines a product, and that when the prior art discloses a product substantially the same as that being claimed, the burden falls upon the applicant to show that any process steps associated therewith results in a product materially different from that disclosed in the prior art. See *In re Thorpe*, (227 USPQ 964), *In re Brown*, (173 USPQ 685), *In re Fessman*, (180 USPQ 524) and MPEP 2113. In the instant case, the aluminum alloy of Otani et al. appears to be substantially identical with

claimed, burden is on applicant to show that the recited process steps in fact results in a materially different product from Otani et al.

Response to Arguments

Applicant's arguments filed 10/14/09 have been fully considered but they are not persuasive.

Applicant first argues, the addition of Si in Otani et al. is not to improve heat resistance of aluminum alloy as claimed, but is to improve wear resistance. This argument is incommensurate with the scope of instant claims since instant claims do not require such a feature. In addition, once silicon is added in the aluminum alloy of Otani et al., it would be inherently capable to increase the heat resistance as claimed.

Applicant then argues adjusting the size of the silicon in the aluminum alloy to the claimed range would impair the purpose of Otani et al. since Otani et al. imply making the grain size of silicon smaller would decrease the abrasion resistance of the aluminum alloy. However, as stated in the previous action, Otani et al. disclose the size and the quantity of Si added affects the alloy strength, nowhere in the disclosure of Otani et al. teaches or implies the size alone decreases the abrasion resistance, as asserted by applicant. In addition, Otani et al. aim for making a heat resistant and abrasion resistance aluminum alloy. Therefore, one of ordinary skill in the art would have adjusted the size and amounts of Si added, e.g., to the claimed size, to achieve desired alloy strength of the aluminum alloy, such as an aluminum alloy with improved abrasion resistance without sacrificing the heat resistance.

In addition, applicant cites a reference JP '723 as an evidence to show the silicon crystal size would be adjusted to more than 7 μm to obtain the best abrasion resistance, which is beyond the claimed range. This argument is not convincing since JP'732 discloses a different alloy from Otani et al. and claimed, the size of silicon crystal for better abrasion resistance does not apply to the aluminum alloy of Otani et al. or claimed. In addition, as stated above, Otani et al. aim for making a heat resistant and abrasion resistant aluminum alloy, i.e., the size of Si crystal would not have been adjusted only for the purpose of increasing abrasion resistance while scarfing the heat resistance, as implied by the applicant. Thus, applicant's argument is not persuasive.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to REBECCA LEE whose telephone number is (571)270-5856. The examiner can normally be reached on Monday-Friday 8:00 am - 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ROY KING can be reached on (571)272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. L./
Examiner, Art Unit 1793

/Roy King/
Supervisory Patent Examiner, Art
Unit 1793